

17Aug11 10:40 SALES ACKNOWLEDGMENT No: PEC ST-360251
 Sold By:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 9057389033

Sold To: (20115)
 DART AEROSPACE
 1270 ABERDEEN ST
 HAWKESBURY, ON K6A 1K7

Ship To: (1)
 DART AEROSPACE
 1270 ABERDEEN ST
 HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS Ord 17Aug11 Due 19Aug11
 Frt PREPAID Via O/T FOB CONCORD
 Con 96294 PO/Re1 14690
 Slp STAN IVERS (905-532-1350) Tel 613-632-9577 Fax 613-632-1053

SALES ACKNOWLEDGMENT SO No PEC ST-360251
 Test Certs: Chem Y Phys Y 1 Original copies with Shipment, 1 with Invoice

1 ALUMINUM FLT BAR ECONOPLT 6061-T6511 .500" X 12.00" X 144.5000"	2 PCS	170 LBS
MATERIAL	24 ' 1.0000 "	24 ' 1.0000 "
ENERGY & CAP SURCHG	15.0320 FT	362.02
	25.0000 LOT	25.00
2 ALUMINUM FLAT BAR 6061-T6511 .375" x 1.00" X 144.0000"	3 PCS	16 LBS
MATERIAL	36 FT @	36 FT
	3.9800 FT	143.28
3 ALUMINUM FLAT BAR 6061-T6511 .125" x .750" X 240.0000"	2 PCS	5 LBS
MATERIAL	25.0000 LOT	25.00
4 ALUMINUM FLAT BAR 6061-T6511 1.250" x 2.00" X 144.0000"	3 PCS	108 LBS
MATERIAL	36 FT @	36 FT
	6.5283 FT	235.02
5 ALUMINUM FLAT BAR 6061-T6511 2.00" x 3.50" X 144.0000"	1 PCS	101 LBS
MATERIAL	12 FT @	12 FT
	18.2917 FT	219.50
6 STAINLESS STEEL ROUND BAR 17-4 PH .750" DIA X 144.0000"	2 PCS	36 LBS
MATERIAL	24 FT @	24 FT
	6.1500 FT	147.60
7 ALUMINUM SHEET 5052-H32 .0510 Nom X 48.0000" X 96.0000"	2 PCS	46 LBS
MATERIAL	2 PCS @	97.00
	48.5000 EA	
8 ALUMINUM SHEET 5052-H32 .0910 Nom X 48.0000" X 96.0000"	1 PCS	41 LBS
MATERIAL	1 PCS @	86.10
	86.1000 EA	86.10

*****ADD ON TO 360248 SHIP TOGETHER*****

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
 WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR

17Aug11 10:40

SALES ACKNOWLEDGMENT

No: PEC ST-360251

Sold By:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 9057389033

Sold To: (20115)
DART AEROSPACE

Ship To: (1)
DART AEROSPACE

SALES ACKNOWLEDGMENT SO No PEC ST-360251

Test Certs: Chem Y Phys Y 1 Original copies with Shipment, 1 with Invoice
TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **

** REFERENCED ON IT **

** CUSTOMER PICK-UP HRS / 9:00 AM TO 4:00 PM **

*** TEL. 800-926-2600 ***

* WE STOCK STAINLESS STEEL!!!! *

* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE
ADDED TO EVERY ORDER. ***

Order Totals: 8 Items 523 LBS

Material	Processing	Freight	Other	Taxes	ORDER AMT
1,315.52			25.00	174.27	1,514.79

Taxes: ONHSTS 174.27

B I L L O F L A D I N G

No: PEC 725323

Ship From:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 9057389033

Ship Date 19Aug11 at 14:14 From PFW
 Probill
 Via O/T
 FOB CONCORD
 Frt PREPAID
 Route 0- 0 Manifest
 Vhcle Trailer
 Slp STAN IVERS (905-532-1350)
 Sold To: (20115)
 DART AEROSPACE

Ship To: (1)
 DART AEROSPACE

B I L L O F L A D I N G

WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
 TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **
 ** REFERENCED ON IT **

TOTAL 3 BDLS , 1 SKID G.W 685 LBS
 ITEM (1) BDL
 ITEM (2,4,5,6) BDL
 ITEM (3) BDL
 ITEM (7-8) SKID

*CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA
 CONCORD, ONT.* *** 9:00 AM TO 4:00 PM ***

**** TEL. 800-926-2600 ****

* WE STOCK STAINLESS STEEL *

* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE
 ADDED TO EVERY ORDER.***

Page: 3 Last

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
 RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
 MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

.375" x 1.00" x 144.0000"

PART NO.

PO/Ref 14690

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL: PEC-72S323-002

19 Aug 11

Pg 1/1

Signed by: *Tom G. Small*



CERTIFIED TEST REPORT

<http://Certs.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
14020 S. COIL PLUS DR UNIT 100
PLAINFIELD, IL 60544

CUSTOMER PO NUMBER:		CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:		
PEC-231374-5		019884-6		.375 X 1.000 SC RECT BAR		
KAISER ORDER NUMBER:	LINE ITEM:	SHIP DATE:	KAISER LOT NUMBER:	ALLOY:	TEMPER:	
9085852	005	07/11/2011	HK067 780	6061	T6511	
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:	DIAM/DAF/THKNS:	WIDTH:	LENGTH:	
1016.000 LB	192.000 PCS	966945			12.000 FT	
SHIP TO:	SOLD TO:					
THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA	THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA					

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	%Elong in 2	HARDNESS	CONDUCT.	BEND
XTR104883	00C1	0001	48.1	42.6	21.3	RE 96	N/A	N/A
XTR104883	00C1	0002	47.0	41.8	20.7	RE 95	N/A	N/A
XTR104883	00C1	0003	48.2	42.8	20.7	RE 95	N/A	N/A
XTR104883	00C1	0004	47.8	42.2	21.3	RE 96	N/A	N/A
XTR104883	00C1	0005	48.1	42.6	21.7	RE 96	N/A	N/A
XTR104883	00C1	0006	48.0	42.2	21.8	RE 96	N/A	N/A
XTR104883	00C1	0007	47.4	42.0	20.8	RE 96	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	NA	NA	NA	C.05	0.15
Minimum	0.40		0.15		0.8	0.04			NA	NA	NA		

Applicable Requirements:

ASTM-B221-08-STENCILED ASME-SB221 1998 SECT TT AMS-QQ-A-2C0/8 UNS#96061 (T6511 also conforms to T6-not applicable to other tempers)

Miscellaneous Notes

MANUFACTURED IN USA (LOS ANGELES, CA) MELTED IN USA

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Tom G. Small, Jr., QA Manager

Tom G. Small, Jr.

Plant Serial: 00348343

Kaiser Order Number: 9085852

Page 1 of 1

Line Item: 005

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

.125" x .750" X 240.0000"

PART NO.

PO/Ref:14690

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL-PEC-725923-003

19 Aug 11

Pg 1/1

Signed by:

Aim:

CAN ART
ALUMINUM EXTRUSION INC.

Material Test Report

Customer Ship To:

ThyssenKrupp Materials NA

2821 Langstaff Road

Concord

ON L4K 5C6

Our Order: 369346 - 5

Your PO #: PEC-221485

Part #: 05485-000-240

Die: ES05485

Description: .125 x .750

Alloy Temper 6061 T6511

Print Date: 5/17/2010

Chemical Properties

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	others each	others total	Al
0.40-0.8	0.7 max	0.15-.40	0.15 max	0.8-1.2	0.04-0.35	0.25 max	0.15	0.05	0.15	remain

Mechanical Properties

Strength ksi

Test ID	Test Date	CastNum	Ultimate	Yield (2% Offset)	Elongation (2" gage length)	Skid #
210495	5/14/10	10041251A	43.97	36.41	11.1	5126115

Applicable Specifications: ASTM B221-06 ASTM B308 ASTM B429 QQ-A200/8 QQ-A200/16

Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with Aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs which may be incurred during the customer's manufacture and sale of its products, and is subject only to the replacement of any materials not within agreed upon specifications provided written notification is received by Can Art within 30 days from the date of shipment.

Jason Carlson - Tensile Testing

Authorized


Evan Eng, Quality Assurance Mgr.

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

1.250" x 2.00" X 144.0000"

PART NO.

PO/Ref:14690

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

RI:PPC-725323-004

19 Aug 11

Pg. 1/1

KAISER
ALUMINUM
FABRICATED PRODUCTS

Brett G.

CERTIFIED TEST REPORT

<http://Certs.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
14020 S. COIL PLUS DR UNIT 100
PLAINFIELD, IL 60544

CUSTOMER PO NUMBER:		CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:							
PEC-231385-9		020354-7		1.250 X 2.000 SC RECT BAR							
KAISER ORDER NUMBER:		LINE ITEM:		SHIP DATE:		KAISER LOT NUMBER:					
9085863		009		08/02/2011		HK115 275					
WEIGHT SHIPPED:		QUANTITY:		B/L NUMBER:		ALLOY:					
1058.000 LB		30.000 PCS		967374		T6511					
SHIP TO:		SOLD TO:									
THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF RAOD CONCORD, ON L4K 5C6 CANADA									

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	%Elong in 2	HARDNESS	CONDUCT.	BEND
XTR108599	0001	1	50.0	44.9	14.2	RE	95	N/A
XTR108599	0001	2	52.2	46.3	13.7	RE	95	N/A
XTR108599	0001	3	47.8	42.6	11.8	RE	95	N/A
XTR108599	0001	4	50.0	44.1	17.9	RE	95	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40		0.15		0.8	0.04			NA	NA	NA		

Applicable Requirements:

ASTM-B221-08-STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 CNS#96061 (T6511 also conforms to T6-not applicable to other tempers)

Miscellaneous Notes

MANUFACTURED IN USA (SHERMAN, TX) MELTED IN USA

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Tom G. Small, Jr., QA Manager

Tom G. Small, Jr.

Plant Serial: 00351579

Kaiser Order Number: 9085863

Page 1 of 1

Line Item: 009



THEYSSSENKRUPP MATERIALS N.A.

DARK AUKOSPACK

ALUMINUM LAMINATE BACKING - 16511
2.00" x 3.50" x 14.000"

PART NO.

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in an approved lab.

Signed by

CERTIFIED INSPECTION REPORT AND TEST RESULTS

SERVICE CENTER METALS
5850 Quality Way

Prince George, VA 23875

BILL TO		MANIFEST NUMBER		DATE OF SHIPMENT	
ThyssenKrupp Materials NA		137908		8/11/2011	
SHIP TO		CUSTOMER PO		ALLOY / TEMPER	
ThyssenKrupp Materials NA PEC		PEC-232091		6061-T6511	
Quantity Certified		CUSTOMER PART NUMBER		SALESPERSON	
1,296 lbs		RB0148		David Schroeder	
Description		SCRB 2.000x3.500		SPECIFICATION	
				AMS-QQA-200/8	
<p><i>We herby certify that the material covered by this report has been inspected to conform with the above specification.</i></p>					

revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA from ingot melted and cast in the United States or Canada.

Items produced and certified as 6051-T6511 also meet the requirements of 6051-T6

Mechanical Properties

Test No. 1 Lot No. 201112308

Chemical Composition for Aluminum Alloy 6061

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
C29J0985	8061	0.74	0.39	0.33	0.09	0.88	0.09	0.01	0.02

Melted In
United States of America

Melted In
United States of America

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL ROUND BAR 17-4 PH
750" DIA X 144.0000"
PART NO.

PO/RE: 14690

We certify that this is a true copy of the report
submitted by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL-PEC-224550-006

19 Aug 11

Pg 1/2

Signed by: *Terry*

CERTIFICATE OF TESTS CERT SERIAL# .000742211



TALLEY METALS
A Carpenter Company

Talley Metals Technology, Inc.
205 Talley Metals Lane
McBee, SC. 29101 Tel: (610) 208-2000 (800) 338-4592

ABNAHMEPRUEFZEUGNIS

CERTIFICAT DE CONTROLE

- THE RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FEDERAL STATUTES INCLUDING FEDERAL LAW 18 U.S.C. CHAPTER 47.
- THE VALUES AND OTHER TECHNICAL DATA REPRESENT THE RESULTS OF ANALYSES AND TESTS MADE ON SAMPLES COLLECTED FROM THE TOTAL LOT. ORIGINAL DATA RECORDS CAN BE TRACED BY REFERENCE TO THE CARPENTER ORDER NUMBER.
- MATERIAL IS MANUFACTURED FREE FROM MERCURY, RADIUM, ALPHA AND GAMMA SOURCE CONTAMINATION.
- THIS DOCUMENT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN CONSENT OF CARPENTER TECHNOLOGY CORPORATION.

10/25/10
CUSTOMER/BESTELLER/CLIENT

SELLER/VERKAUFER/VENDEUR PAGE 1 OF 2

THYSSENKRUPP MAT'L'S. CA LTD
PECKOVER'S
2821 LANGSTAFF ROAD
CONCORD, ONTARIO
L4K 5C6 , CANADA

TALLEY METALS TECH, INC.
ACCOUNTS PAYABLE
P. O. BOX 2498
HARTSVILLE , SC 29551

CUSTOMER ORDER NO /BESTELL-NR./Nº DE COMMANDE	CARPENTER NO./WERKS-NR./Nº DE REFERENCIE INTERNE	DATE/DATUM/DATE	WEIGHT/GWICHT/Poids
PEC-224550-001	TLY581501 L10027	10/25/10	1113.000

HEAT NUMBER / SCHMELZE-NR. / N° DE COULEE: 153369

PRODUCT DESCRIPTION: TYPE 17-4 SOLUTION ANNEALED COLD FINISH

SPECIFICATION: TALLEY 17-4T3A CAP OF H900

AMS 2303 REV E (10/ /01)
AMS 2315 REV F (01/ /08)
AMS 5643 REV R (02/ /08) UNS S17400
ASTM-A484-09
ASTM-A564-04 (2009)
ASME-SA564 2007 EDITION-09B ADDENDA AISI 630

SIZE 0.750000 IN. (19.05 MM) RD BAR

PRIMARY HEAT CHEMISTRY (WT%): (TEST METHOD IS SHOWN IN PARENTHESIS)

C (COM)	MN (XRF)	SI (XRF)	P (XRF)	S (COM)	CR (XRF)
0.028	0.86	0.41	0.020	0.024	15.21
NI (XRF)	MO (XRF)	CU (XRF)	N (FUS)	CB (XRF)	TA (XRF)

CB+TA
0.26

THIS HEAT MELTED BY THE ARC/AOD PROCESSES
THIS MATERIAL WAS MANUFACTURED IN ACCORDANCE WITH CARPENTER SPECIALTY ALLOYS
OPERATIONS QUALITY PROGRAM MANUAL REVISION 28, DATED 03/31/10.

MILL HEAT TREATMENT:

TYPE SOL ANL
TEMP 1900F (1037C)
TIME (BATCH FURNACE) 1.30 HOURS
QUENCH WATER

DISCS MACROETCHED AND APPROVED

HARDNESS AS SHIPPED, HBW - 304 (MIDRADIUS)

MAGNETIC PARTICLE: FREQUENCY = 0 / SEVERITY = 0
*** UNKNOWN

MICROSTRUCTURE - FERRITE - NONE

CONTINUED ON NEXT PAGE

This certification is made to the customer printed on this form. Carpenter neither makes, nor assumes responsibility for, any representation or certification to other parties.
Die vorliegende Zertifizierung ist nur für den in diesem Formular genannten Kunden gültig. Carpenter übernimmt gegenüber Dritten keinerlei Haftung für die ausgewiesenen Daten oder Zertifizierungen.
Ce certificat est uniquement valable pour le client dont le nom est inscrit sur ce formulaire. Carpenter n'assume pas de responsabilité pour une certification vis-à-vis d'une tierce personne.

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL ROUND BAR 17-4 PH
750" DIA X 144.0000"
PART NO.

PO/Ref:14691

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-725323-006

19 Aug 11

Pg 2/2

CERTIFICATE OF TESTS CERT SERIAL# 000742211



TALLEY METALS
A Carpenter Company

Talley Metals Technology, Inc.
205 Talley Metals Lane
McBee, SC. 29101 Tel: (610) 208-2000 (800) 338-4592

10/25/10
CUSTOMER/BESTELLER/CLIENT

ABNAHMEPRUEFZEUGNIS

CERTIFICAT DE CONTROLE

- THE RECOGNIZING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHED AS A FELONY UNDER FEDERAL STATUTES INCLUDING FEDERAL LAW, TITLE 18, CHAPTER 47.
- THE VALUES AND OTHER TECHNICAL DATA REPRESENT THE RESULTS OF ANALYSES AND TESTS MADE ON SAMPLES COLLECTED FROM THE TOTAL LOT. ORIGINAL DATA RECORDS CAN BE TRACED BY REFERENCE TO THE CARPENTER ORDER NUMBER.
- MATERIAL IS MANUFACTURED FREE FROM MERCURY, RADIUM, ALPHA AND GAMMA SOURCE CONTAMINATION.
- THIS DOCUMENT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN CONSENT OF CARPENTER TECHNOLOGY CORPORATION.

SELLER/VERKÄUFER/VENDEUR PAGE 2 OF 2

THYSSENKRUPP MAT'L'S. CA LTD
PECKOVER'S
2821 LANGSTAFF ROAD
CONCORD, ONTARIO
L4K 5C6 , CANADA

TALLEY METALS TECH, INC.
ACCOUNTS PAYABLE
P. O. BOX 2498
HARTSVILLE , SC 29551

CUSTOMER ORDER NO./BESTELL-NR./Nº DE COMMANDE	CARPENTER NO./WERKS-NR./Nº DE REFERENZ INTERNE	DATE/DATUM/DATE	WEIGHT/GEWICHT/Poids
PEC-224550-001	TLY581501 L10027	10/25/10	1113.000

HEAT NUMBER / SCHMELZE-NR. / N° DE COULEE : 153369
CAPABILITY

900 F (482 C), 01 HR AIR COOL

YIELD STRENGTH, (0.20 %) KSI (MPA)	204.0 { 1407 }
TENSILE STRENGTH, KSI (MPA)	208.0 { 1434 }
ELONGATION IN 1.40", %	12.0
REDUCTION OF AREA, %	51.0
HARDNESS , HBW	411.0

(CONVERTED FROM TENSILE STRENGTH)

NO WELD REPAIR PERFORMED
MATERIAL PRODUCED ON THIS ORDER WAS MELTED AND MANUFACTURED IN THE U.S.A.
MATERIAL HAS BEEN MELTED IN USA OR QUALIFYING COUNTRY TO DFARS REQUIRE-
MENTS 252.225-7014 WITH ALTERNATE 1 FOR QUALIFYING COUNTRY 225.872.1,
SUPERSEDED BY DFARS REQUIREMENTS DFARS 252.225-7008 AND 252.225-7009.
WE HEREBY CERTIFY THAT THE ABOVE TEST DATA ARE IN ACCORDANCE WITH THE
PURCHASE ORDER AND SPECIFICATION REQUIREMENTS. CERTIFICATE OF TEST IS
PREPARED IN ACCORDANCE WITH PARAGRAPH 3.1 OF EN 10204 (DIN50049)

STEPHANIE E. MCCULLUM
QUALITY ASSURANCE ENGINEER
CARPENTER TECHNOLOGY CORPORATION

Stephanie E. McCullum

This certification is made to the customer printed on this form. Carpenter neither makes, nor assumes responsibility for, any representation or certification to other parties.
Die vorliegende Zertifizierung ist nur für den in diesem Formular genannten Kunden gültig. Carpenter übernimmt gegenüber Dritten keinerlei Haftung für die ausgewiesenen Daten oder Zertifizierungen.
Ce certificat est uniquement valable pour le client dont le nom est indiqué sur ce formulaire. Carpenter n'assume pas de responsabilité pour une certification vis-à-vis d'une tierce personne.

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SHEET 5052-H32
0.510 Nom X 48.0000" X 96.0000"
PART NO.

PO/Ref 14690

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-72522-007

19 Aug 11

Pg 1/2

Signed by *Dreyfus*

OLBERT METAL SALES LIMITED

THYSSENKRUPP MATERIALS NA

ALUMINUM SHEET - 5052 H32 MILL FINISH
0.50 NOM X 48.0000" X 96.0000"
PART NO.

PO/Ref PEC-218658

Certificate of Mill Test Results

BL TO -006801-002

7 May

Pg 1/2

HENAN MINGTAI AL INDUSTRIAL CO., LTD
HUIGUO ZHEN, GONGYI, HENAN, CHINA 451283

TEL: 371-67898611 FAX: 371-67898612

MILL TEST CERTIFICATE

TO:

OLBERT METAL SALES LIMITED
989 DERRY RD. EAST, SUITE 305 MISSISSAUGA,
ONTARIO CANADA L3T 2J8

INVOICE NO.: OMTR9121

CONTRACT NO.: JM42

LOADING PORT: TIANJIN, CHINA

DESTINATION: TORONTO, CANADA

SHIPPING MARKS: N/M

DATE: DEC. 11, 2009

DESCRIPTION OF GOODS:

ALUMINUM ALLOY 3003-H14 SHEETS CERTIFIED TO ASTM B209, AMS 4008H AND AA SPECS. AND ALLOY 5052-H32 SHEETS CERTIFIED TO ASTM B209, AMS 4016K AND AA SPECS. ALUMINUM ALLOY 3003 H22 BRIGHT TREAD PLATES WITH DIAMOND PATTERN TO ASTM B632 AND AA SPECS. REFERENCE 1583, 1595, 1596, 1598, 1602, 1603 CIF TORONTO ONTARIO, CANADA.

CHEMICAL COMPOSITION Unit-%											
Heat No.	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other	Al
D091162	5052	0.104	0.368	0.024	0.082	2.354	0.197	<0.001	0.021	0.15	REMAINDER
D091161	5052	0.102	0.343	0.016	0.058	2.398	0.193	<0.001	0.021	0.15	REMAINDER
D091114	5052	0.093	0.367	0.01	0.054	2.317	0.184	<0.001	0.02	0.15	REMAINDER
B-9111224	5052	0.147	0.347	0.0218	0.0898	2.30	0.236	0.0252	0.0185	0.15	REMAINDER
B-9111223	5052	0.103	0.312	0.014	0.041	2.367	0.200	0.009	0.016	0.15	REMAINDER
B-9111222	5052	0.084	0.273	0.010	0.030	2.277	0.192	0.009	0.018	0.15	REMAINDER
B-9111171	5052	0.090	0.348	0.012	0.047	2.382	0.223	0.009	0.017	0.15	REMAINDER
B-9111125	5052	0.108	0.357	0.021	0.047	2.419	0.208	0.009	0.013	0.15	REMAINDER
B-9111124	5052	0.085	0.330	0.011	0.045	2.372	0.180	0.009	0.016	0.15	REMAINDER
B-9111125	5052	0.088	0.320	0.014	0.046	2.370	0.201	0.007	0.018	0.15	REMAINDER
B-9091138	5052	0.092	0.350	0.011	0.084	2.301	0.214	0.009	0.013	0.15	REMAINDER
B-9091183	5052	0.088	0.320	0.014	0.046	2.370	0.201	0.007	0.018	0.15	REMAINDER
D091133	3003	0.134	0.414	0.0744	1.09	<0.0050	/	0.0109	0.0356	0.15	REMAINDER
D091132	3003	0.117	0.420	0.0728	1.11	<0.0050	/	0.0109	0.0357	0.15	REMAINDER
D091131	3003	0.116	0.406	0.0808	1.09	<0.0050	/	0.0110	0.0357	0.15	REMAINDER
R8-4731-1	3003	0.168	0.428	0.0738	1.08	<0.0050	/	0.0092	0.0343	0.15	REMAINDER
B-9111215	3003	0.110	0.415	0.0759	1.14	0.0084	/	0.0102	0.0311	0.15	REMAINDER
B-9111047	3003	0.178	0.420	0.0698	1.08	<0.0050	/	0.0104	0.0364	0.15	REMAINDER
B-9111046	3003	0.104	0.417	0.0722	1.09	<0.0050	/	0.0102	0.0350	0.15	REMAINDER
B-9111045	3003	0.0825	0.408	0.0708	1.10	<0.0050	/	0.0069	0.0394	0.15	REMAINDER
B-9111044	3003	0.109	0.437	0.0787	1.09	0.0305	/	0.0102	0.0362	0.15	REMAINDER
B-9111043	3003	0.106	0.417	0.0728	1.05	0.0109	/	0.0108	0.0344	0.15	REMAINDER
B-9091148	3003	0.148	0.420	0.0781	1.10	0.0062	/	0.0065	0.0354	0.15	REMAINDER
B-9111049	3003	0.158	0.435	0.0710	1.11	<0.0050	/	0.0065	0.0322	0.15	REMAINDER
A-9117689	3003	0.174	0.444	0.0816	1.14	<0.0050	/	0.0100	0.0322	0.15	REMAINDER
74981	3003	0.265	0.544	0.060	1.021	0.038	/	0.0098	0.0309	0.15	REMAINDER
75201	3003	0.335	0.561	0.067	1.085	0.037	/	0.048	0.028	0.15	REMAINDER
75241	3003	0.314	0.579	0.068	1.081	0.028	/	0.023	0.032	0.15	REMAINDER

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SHEET, 5052-H32
.051" NOM X .48.0000" X .96.0000"
PART NO.

PO/RD 14690

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL-PEC-725323-007

19 Aug 11

Pg. 2/2

OLBERT METAL SALES LIMITED

THYSSENKRUPP MATERIALS NA

ALUMINUM SHEET - 5052-H32 MILL FINISH
.050 NOM X .48.0000" X .96.0000"
PART NO.

PO/RD PEC-218658

Certificate of Mill Test Results

BL TO-006801-002

7 May

Pg 2/2

Heat No.	Alloy	Temper	Specs(in)	Tensile strength (Mpa/ ksi)	Elongn %
D091162	5052	H32	.25x48x96	231	34
D091162	5052	H32	.25x48x120	231	34
D091161	5052	H32	.188x48x96	230	33
D091161	5052	H32	.188x48x120	230	33
D091114	5052	H32	.25x48x120	230	33
B-9111224	5052	H32	.125x80x120	226	33
B-9111223	5052	H32	.081x48x120	225	33
B-9111222	5052	H32	.081x48x96	231	34
B-9111171	5052	H32	.091x48x96	230	33
B-9111171	5052	H32	.091x48x120	230	33
B-9111126	5052	H32	.125x48x120	232	34
B-9111124	5052	H32	.125x46x96	229	34
B-9111122	5052	H32	.064x48x96	229	33
B-9111122	5052	H32	.064x48x120	229	33
B-9091138	5052	H32	.125x48x96	226	33
B-9091133	5052	H32	.05x48x96	228	33
D091133	3003	H14	.188x48x120	164	24
D091132	3003	H14	.25x45x96	171	25
D091132	3003	H14	.25x48x120	171	25
D091131	3003	H14	.188x48x96	231	34
D091131	3003	H14	.188x48x120	231	34
R8-4731-1	3003	H14	.236x48x96	165	24
B-9111215	3003	H14	.061x60x120	164	24
B-9111047	3003	H14	.125x60x120	175	25
B-9111046	3003	H14	.081x60x120	162	23
B-9111046	3003	H14	.125x48x96	162	23
B-9111044	3003	H14	.081x48x120	163	24
B-9111043	3003	H14	.081x48x96	162	23
B-9091149	3003	H14	.125x48x96	162	23
B-9111049	3003	H14	.125x48x96	164	24
B-9111049	3003	H14	.125x48x120	164	24
A-8117620	3003	H14	.081x48x96	153	22
74881	3003	H22	.188x60x120	127	18
75201	3003	H22	.125x60x120	129	18
75241	3003	H22	.063x48x120	136	20
75251	3003	H22	.063x48x96	138	20
75831	3003	H22	.188x48x96	127	18
77741	3003	H22	.188x60x120	123	18

PRODUCER: HENAN MINGTAI AL. INDUSTRIAL CO., LTD

HENAN MINGTAI AL. INDUSTRIAL CO., LTD
河南明泰铝业股份有限公司

47/2

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SHEET 5052-H32
0.910" Nom X 48.0000" X 96.0000"
PART NO.

PO/Ref: 14690

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-725323-008

19-Aug-11

PG 1/1

Signed by: *Tracy M*

MILL TEST CERTIFICATE		No: 6172	CERTIFIED SRAC-IONet	Vimetco
Date: 6/16/2010		ISO 9001/2008 No. 104-2008		W.J. W. <i>Slatina</i>

CUSTOMER : OLBERT METAL SALES LIMITED

CONTRACT/ORDER : 1642
BILL OF DELIVERY : 80071497
TRUCK/CONTAINER : HLXU 4272210

SHIPMENT OF 41,914.319 LBS ALUMINUM COILS MILL FINISH IN ALLOY 5052 H32, ACCORDING TO
ASTM B-209-07, AMS-QQ-A-250/8B; ANSI H35.2-2009, FROM CONSTANTA ROMANIA TO TORONTO, CANADA
CIF TORONTO CANADA

MATERIAL : ALUMINUM COILS
ALLOY : 5052
DIMENSIONS (mm) : 80009694 - . 0.091"THX48.00"WD
80009350 - . 0.091"THX48.00"WD
80009351 - . 0.064"THX48.00"WD
ACCORDING TO : ASTM B-209;AMS QQA- 250/8B; ANSI H35.2

TEMPER: H32

ACTUAL MECHANICAL PROPERTIES			1 MPa = 1 N/mm ² = 0.145 ksi = 0.102 kgf/mm ²								
LOT / BATCH	CASE	NET WEIGHT lbs	Specified values:	UTS KSI		YTS KSI		Elong. %		Hardness	
				min.	max.	min.	max.	min.	max.	HB	min.
				31	38	23	23	7	7		
Measured values:											
80009694	40398	7,888.146		32.9	24.3	17	17				
S10050440				32.8	24	17	17				
80009350	38582	8,268.523		33.6	26.4	18	18				
S10040359				33.2	26.1	14	14				
80009351	39570;39572	14,744.528		33.6	24.6	17	17				
S10050424				33.9	24.6	17	17				

ACTUAL CHEMICAL ANALYSIS %

BATCH	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	Al
S10050440	0.06	0.15	0.01	0.035	2.33	0.19	0.004	0.006	0.024	0.01	0.015	REM.
S10040359	0.057	0.13	0.008	0.03	2.37	0.23	0.003	0.016	0.028	0.011	0.014	REM.
S10050424	0.06	0.15	0.044	0.026	2.38	0.2	0.004	0.003	0.013	0.011	0.017	REM.
Min.												
Max.	0.25	0.4	0.1	0.1	2.8	0.35	0.05	0.1	0.05	0.05	0.05	REM.
Remarks:	Other- Each- Max.: 0.05						Others Total- Max.: 0.15					

REMARKS:

BENDING TEST OF 90 DEGREES RADIUS : ACCEPTED

ACCORDING TO: ASTM B-209-2007; AMS-QQ-A-250/8B:2007; ANSI H35.2-2009

We hereby certify that the material detailed hereon has been produced and tested according to the requirements of the relevant specification and/or order. Keep in dry conditions, without large temperature variations. The difference between metal and air must be maxim 10 degrees C.

According to EN 10204:2004 3.1

QUALITY CONTROL DEPT.

ALRO S.R.L. No.116, Piatai Street Phone: +(40) 0249 436 117; 0249 432 556 alro@alro.ro
230048-Bistrita-ROMANIA Fax: (40) 0249 411 487; 0249 411 982 www.alro.ro

cod f1/PO-451/Rv.1/2008

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL "A"
TORONTO, ON M5W 5V8
CA

M118641

Contact Name

Vendor Phone 905 669 9444
Vendor Fax 905 738 9033

Vendor Account Nbr

Buyer Chantal Lavoie
Requisition Nbr
Tax Resale Nbr 10127-2607
Terms Net 30
Currency CAD
FOB Destination-Collect

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADAFAXED
C8/16/2011

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req. Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price	
1	M7075T6S.050	7075-T6 SHEET .050	8/24/2011 Yes	32.00 sf	Yours ppd	\$7.0312	\$225.00	
		Special Inst:	MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A- 250/12 OR AMS 4045 OR ASTM B209					
2	M6061T6B0.500X12.000 ✓ CZ/16/2011	6061-T6 Bar .500 x 12.00	8/24/2011 Yes	24.00 f	Yours ppd	\$15.0320	\$360.77	
		Special Inst:	MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR ASM-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221					
3	M6061T6B0.375X01.000 ✓ CZ/16/2011	6061T6 BAR .375 x 1.00	8/24/2011 Yes	36.00 f	Yours ppd	\$0.9800	\$35.28	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PO REPRINT

Purchase Order ID PO14690

Purchase Order Date 8/16/2011
PO Print Date 8/16/2011

Page Number 2 of 4

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL "A"
TORONTO, ON M5W 5V8
CA

Contact Name

Vendor Phone 905 669 9444

Buyer Chantal Lavoie

Vendor Fax 905 738 9033

Requisition Nbr

10127-2607

Vendor Account Nbr

Tax Resale Nbr

Net 30

Terms

CAD

Currency

FOB Destination-Collect

Special Inst:

MATERIAL: 6061-
T6/T651/T6510/T6511/T62
ALUMINUM BAR AS PER
QQ-A-225/8 OR AMS-QQ-A-225/8 OR
AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR ASM-QQ-A-200/8
OR AMS 4160 OR
ASTM B211 OR ASTM B221

4 M6061T6B00750X00.125 6061-T6 Bar .750 x .125 8/24/2011 40.00 Yours ppd \$0.6250 \$25.00

✓
CZ1108119

Special Inst:

MATERIAL: 6061-
T6/T651/T6510/T6511/T62
ALUMINUM BAR AS PER
QQ-A-225/8 OR AMS-QQ-A-225/8 OR
AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR ASM-QQ-A-200/8
OR AMS 4160 OR
ASTM B211 OR ASTM B221

5 M6061T6B2.000X01.250 6061-T6 Bar 2.00 x 1.25 8/24/2011 36.00 Yours ppd \$6.5283 \$235.02

✓
CZ1108119

Special Inst:

MATERIAL: 6061-
T6/T651/T6510/T6511/T62
ALUMINUM BAR AS PER
QQ-A-225/8 OR AMS-QQ-A-225/8 OR
AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR ASM-QQ-A-200/8
OR AMS 4160 OR
ASTM B211 OR ASTM B221

6 M6061T6B2.000X03.500 6061-T6 Bar 2.00 x 3.50 8/24/2011 12.00 Yours ppd \$18.2916 \$219.50

✓
CZ1108119

Special Inst: MATERIAL: 6061-

8/16/2011

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL "A"
TORONTO, ON M5W 5V8
CA

Contact Name

Vendor Phone 905 669 9444
Vendor Fax 905 738 9033

Vendor Account Nbr

Buyer Chantal Lavoie
Requisition Nbr
Tax Resale Nbr 10127-2607
Terms Net 30
Currency CAD
FOB Destination-CollectT6/T651/T6510/T6511/T62
ALUMINUM BAR AS PER
QQ-A-225/8 OR AMS-QQ-A-225/8 OR
AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR ASM-QQ-A-200/8
OR AMS 4160 OR
ASTM B211 OR ASTM B221

7	M174R0.750 <i>CL4108119</i>	17-4 round bar .750	8/24/2011 Yes	24.00 f	Yours ppd	\$6.1500	\$147.60
Special Inst: MATERIAL: 17-4PH S17400/TYPE 630 SS ROUND BAR PER AMS 5643/ASTRM A564 GRAIN MUST BE ALONG LENGTH OF BAR MINIMUM YIELD TENSILE STRENGTH = 100KSI MINIMUM ULTIMATE TENSILE STRENGTH = 150KSI							
8	M5052H32S.040 <i>CL41108119</i>	5052-H32 .040 Sheet	8/24/2011 Yes	64.00 sf	Yours ppd	\$1.5156	\$97.00
Special Inst: MATERIAL: 5052-H32 ALUMINUM SHEET AS PER QQ-A-250/8 OR AMS-QQ-A-250/8 OR ASTM 4016 OR ASTM B209							
9	M5052H32S.090 <i>CL41108119</i>	5052-H32 .090 Sheet	8/24/2011 Yes	32.00 sf	Yours ppd	\$2.6906	\$86.10
Special Inst: MATERIAL: 5052-H32 ALUMINUM SHEET AS PER QQ-A-250/8 OR AMS-QQ-A-250/8 OR ASTM 4016							

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL "A"
TORONTO, ON M5W 5V8
CA

Contact Name

Vendor Phone 905 669 9444
Vendor Fax 905 738 9033
Vendor Account Nbr

Buyer Chantal Lavoie
Requisition Nbr
Tax Resale Nbr 10127-2607
Terms Net 30
Currency CAD
FOB Destination-Collect

OR ASTM B209

PO Total:

\$1,431.26

MATERIAL CERTIFICATION
REQD UPON DELIVERY

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable



Change Nbr: 2

Change Date: 8/16/2011